

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A network interface configured to connect
~~connectable~~ to a packet-based data network on which a plurality of different types of payload
data are distinguished by network-based packet header data₁[[;]] said network interface
comprising:

a plurality of data handling nodes; and

a routing arrangement responsive to a packet identifier configured to route ~~for routing~~
data packets between said data handling nodes₁[[;]] wherein ~~in which~~:

one of said data handling nodes is a network processor configured to receive ~~for~~
~~receiving~~ one of the data packets from and configured to transmit ~~transmitting~~ another of the
data packets to said packet-based network₁[[;]] said network processor ~~being~~ configured
~~operable~~:

a) in the case of a data packet received from said data network,
to detect a type of payload data from said network-based packet header
data₁[[;]]
to remove said network-based packet header data from said packet₁[[;]] and
to associate with said packet an identifier which specifies a route across said
routing arrangement to a target data handling node and a data handling operation to be carried
out by said target data handling node₁[[;]] and

b) in the case of a data packet received from another data handling node and having
an associated packet identifier,

to detect a type of payload data from said packet identifier₁[[;]]

to remove said packet identifier₁[[;]]

to apply network-based packet header data in dependence on said packet identifier,[[;]] and
to launch said data packet onto said network.

Claim 2 (Currently Amended): A network interface according to claim 1, wherein in
~~which~~ one of said data handling nodes is a data processing arrangement.

Claim 3 (Currently Amended): A network interface according to claim 1, wherein in
~~which~~ one of said data handling nodes is a computer interface.

Claim 4 (Currently Amended): A network interface according to claim 1, wherein in
~~which~~ said identifier includes ~~comprises~~ a type identifier configured to define ~~defining~~ a
target data handling node, and an action identifier configured to define ~~defining~~ a data
handling operation to be carried out by said target data handling node.

Claim 5 (Currently Amended): A network interface according to claim 4, wherein in
~~which~~ said routing arrangement includes ~~comprises~~ a demultiplexer configured to
demultiplex ~~for demultiplexing~~ different types of packets to different routing paths in
dependence on said type identifier.

Claim 6 (Currently Amended): A network interface according to claim 5, wherein in
~~which~~ a respective multiplexer is associated with each data handling node, each multiplexer
~~being arranged~~ configured to receive data packets from said routing paths which have that
data handling node as a target node.

Claim 7 (Currently Amended): A network interface according to claim 4, wherein in
~~which:~~

said types of payload data include audio data and video data₁[[;]] and

one of said data handling nodes is an audio/video processor configured to extract ~~for~~
~~extracting~~ at least one of an audio and ~~[[and/or]]~~ a video data from a packet payload and
configured to generate ~~generating~~ an output audio and/or video signal.

Claim 8 (Currently Amended): A network interface according to claim 7, wherein in
~~which:~~ in the case of a data packet received from said data network including ~~having~~ an audio
or video data payload,

said network processor is configured ~~arranged~~ to associate with said packet an action
identifier which specifies whether said payload includes ~~comprises~~ audio or video data and a
type identifier configured to specify ~~specifying~~ said audio/video processor as said target data
handling node₁[[;]] and

said audio/video processor processes said data packet as audio data or as video data in
dependence on said action identifier.

Claim 9 (Currently Amended): A network interface according to claim 1, wherein in
~~which:~~

said network processor has an associated memory₁[[;]]

said types of payload data include at least video data₁[[;]] and

said network processor is configured to operate ~~operable~~ in a second mode wherein in
~~which~~ an incoming video data packet is stored in said memory at a storage location
dependent upon said video data carried by that packet; said video data being subsequently
read out for output via a data handling node.

Claim 10 (Currently Amended): A network interface according to claim 9, wherein in
~~which~~ said storage location depends on pixel position(s) relating to said video data.

Claim 11 (Currently Amended): A network interface according to claim 9, wherein in
~~which~~ said video data is read out from said memory substantially straight after being stored in
said memory.

Claim 12 (Currently Amended): A network interface according to claim 9, wherein in
~~which~~ said video data is read out from said memory a predetermined delay period after being
stored.

Claim 13 (Currently Amended): A network interface according to claim 1, wherein in
~~which~~ at least one of said types of payload data represents asynchronous data to be carried by
said network.

Claim 14 (Currently Amended): A data network₁ comprising:
~~a plurality of data handling nodes, each having a network interface according to claim~~
~~1; and~~
a data network connecting said a plurality of data handling nodes via said respective
network interfaces, wherein
the plurality of data handling nodes each have a network interface according to claim
1.

Claim 15 (Currently Amended): A network according to claim 14, wherein ~~in which~~ each data handling node includes ~~comprises~~ at least one of a source and ~~and~~ [[and/or]] a sink of data according to at least one of said types of payload data.

Claim 16 (Currently Amended): A data handling node, including ~~having~~:
at least one of a source and ~~and~~ [[and/or]] a sink of data according to at least one of said types of payload data according to claim 1; and
a network interface according to claim 1.

Claim 17 (Currently Amended): A method of operation of a network interface configured to connect ~~connectable~~ to a packet-based data network on which a plurality of different types of payload data are distinguished by network-based packet header data₁[[;]] said network interface including ~~comprising~~ a plurality of data handling nodes₁[[;]] and a routing arrangement responsive to a packet identifier configured to route ~~for routing~~ data packets between said data handling nodes₁ [[;]] wherein ~~in which~~ one of said data handling nodes is a network processor configured to receive ~~for receiving~~ data packets from and transmitting data packets to said packet-based network₁[[;]] ~~said method~~ comprising the steps of:

a) in the case of a data packet received from said data network,
detecting a type of payload data from said network-based packet header data₁[[;]]
removing said network-based packet header data from said packet₁[[;]] and
associating with said packet an identifier which specifies a route across said routing arrangement to a target data handling node and a data handling operation to be carried out by said target data handling node₁[[;]] and

b) in the case of a data packet received from another data handling node and having an associated packet identifier,

detecting a type of payload data from said packet identifier_i[[;]]

removing said packet identifier_i[[;]]

applying network-based packet header data in dependence on said packet identifier_i[[;]] and

launching said data packet onto said network.

Claims 18-19 (Canceled).

Claim 20 (Currently Amended): ~~A medium according to claim 19, said medium being a storage medium~~ A computer readable tangible storage medium encoded with a computer readable program configured to cause an information processing apparatus to execute a method of operation of a network interface configured to connect to a packet-based data network on which a plurality of different types of payload data are distinguished by network-based packet header data, said network interface including a plurality of data handling nodes, and a routing arrangement responsive to a packet identifier configured to route data packets between said data handling nodes, wherein one of said data handling nodes is a network processor configured to receive data packets from and transmitting data packets to said packet-based network, comprising:

a) in the case of a data packet received from said data network,

detecting a type of payload data from said network-based packet header data,

removing said network-based packet header data from said packet, and

associating with said packet an identifier which specifies a route across said routing arrangement to a target data handling node and a data handling operation to be carried out by said target data handling node, and

b) in the case of a data packet received from another data handling node and having an associated packet identifier,

detecting a type of payload data from said packet identifier,

removing said packet identifier,

applying network-based packet header data in dependence on said packet identifier, and

launching said data packet onto said network.

Claim 21 (Canceled).